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WESTINGHOUSE  
ELECTRIC CORPORATION



SAPC 26658  
COPY 1 OF 1

FRIENDSHIP  
INTERNATIONAL AIRPORT  
BALTIMORE, MD.

18 April 1958

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SUBJECT: Contract TA-3034  
Westinghouse Reference AAD-30465  
Monthly Progress Report #10

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*TA-3034*

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In accordance with Item 3 of the subject  
contract, forwarded herewith are three (3) copies  
of Monthly Progress Report #10 on the Terrain Avoidance  
Radar System for the period from 28 February 1958 to  
31 March 1958.

*Can. 283 sent to  
4-22-58*

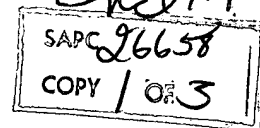
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Sales Engineer

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MONTHLY PROGRESS REPORT #10

on the

TERRAIN AVOIDANCE RADAR SYSTEM

For the period from

February 28, 1958 to MARCH 31, 1958

GO.AAD-30465

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WESTINGHOUSE ELECTRIC CORP.

Air Arm Division

P.O. Box 746

Baltimore 3, Maryland

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MONTHLY PROGRESS REPORT #10

on the

TERRAIN AVOIDANCE RADAR SYSTEM

For the period from

February 28, 1958 to MARCH 31, 1958

The breadboard system was operated several hours during the month. The regular antenna was not available so an antenna which scans in the vertical plane only was used. Satisfactory profiles were painted on the "E" Scope. A display was presented on the "X" Scope by sweeping the beam horizontally at a high rate so that the profile was spread out across the width of the display. The magnetron now has operated for over 80 hours and continues to perform satisfactorily. The AFC locks on without any periodic adjustment of the klystron cavity.

Construction of all units except the final antenna is nearing completion. The "E" Scope is due to be complete April 2nd with all other units due to be complete by April 18th.

Bench testing of the pre-amp., post amp., AFC and modulator has been completed.

The 1.5° rotary feed horn antenna has been completed and tested. It is now being assembled with a reflector and provided with a mechanism to scan the entire assembly vertically. The parallel plate 2° horn has been tested. The beamwidth was 2° at the center and deteriorated to 4° at the edges of the scan. The shape of the curved backwall must be modified to optimize the beamwidth.

The final model of the optical system for the "X" scope is under construction. This is being built under subcontract by Eastman Kodak. RCA is furnishing storage cathode ray tubes with one-half the screen coated with a red phosphor and the other half with a green phosphor. This eliminates the need for red and green filters in front of the images on the usual yellow screen and results in a brightness increase of about 3 or 4 to 1.

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STATUS OF TERRAIN AVOIDANCE RADAR MAR. 31, 1958

